PATENT

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15 March, 2001 _____
Date James Henton

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Paul O. Sheppard et al.
Serial No. :
Filed :
For : DISINTEGRIN HOMOLOGS

Examiner : Kerr, K.
Art Unit : 1652
Docket No. : 98-29D1
Date : March 12, 2001

Assistant Commissioner for Patents
Washington, D.C. 20231

Preliminary Amendment

Sir/Madam:

Please amend the above-identified application as follows:

In the claims:

Please cancel claims 1-7, 10, 14, 16-17, and 24-27.

Please amend claims 8, 9, 11-13, 15, 18-23 as follows:

8. (Amended) An isolated polynucleotide molecule encoding a polypeptide molecule, wherein the polypeptide molecule comprises a contiguous sequence of 13 amino acids of SEQ ID NO:2, wherein the contiguous sequence comprises residues at positions 443 to 445 of SEQ ID NO:2, and wherein the polypeptide binds an integrin.

9. (Amended) An isolated polynucleotide molecule encoding a polypeptide molecule, wherein the polypeptide molecule comprises residues 437 to 450 of SEQ ID NO:2.

11. (Amended) An isolated polynucleotide molecule encoding a polypeptide molecule, wherein the polypeptide molecule comprises residues 164 to 382 of SEQ ID NO:2.

12. (Amended) An isolated polynucleotide molecule encoding a polypeptide molecule, wherein the polypeptide molecule comprises residues 383 to 464 of SEQ ID NO:2.

13. (Amended) An isolated polynucleotide molecule encoding a polypeptide molecule, wherein the polypeptide molecule comprises residues 465 to 696 of SEQ ID NO:2.

15. (Amended) An isolated polynucleotide encoding a fusion protein having a first segment and a second segment, wherein the first segment comprises a polypeptide having a protease domain and the second segment comprises a polypeptide that has a contiguous sequence of 13 amino acids between residues 383 and 464 of SEQ ID NO:2, wherein the first segment is positioned amino-terminally to the second segment, and wherein the protein binds an integrin.

18. (Amended) The isolated polynucleotide molecule according to claim 12, wherein the polypeptide molecule comprises residues 383 to 696 of SEQ ID NO:2.

19. (Amended) The isolated polynucleotide molecule according to claim 18, wherein the polypeptide molecule comprises residues 1 to 696 of SEQ ID NO:2.

20. (Amended) An expression vector comprising the following operably linked elements:

a) a transcription promoter;

b) a DNA segment comprising the polynucleotide according to claim 12; and

c) a transcription terminator.

21. (Amended) The expression vector of claim 20 wherein the DNA segment further encodes an affinity tag.

22. (Amended) A cultured cell into which has been introduced the expression vector according to claim 20, wherein said cell expresses the polypeptide encoded by the DNA segment.

23. (Amended) A method of producing a polypeptide comprising culturing the cell according to claim 22, whereby said cell expresses the polypeptide encoded by the DNA segment; and recovering the polypeptide.

Please add claims 28-41 as follows:

28. (New) The polypeptide produced by the method according to claim 23.

29. (New) An isolated polynucleotide encoding a polypeptide, the amino acid sequence of which comprises residues 438 to 449 as shown in SEQ ID NO:2, wherein the polypeptide binds an integrin.

30. (New) An isolated polynucleotide encoding a polypeptide, the amino acid sequence of which consists of residues 438 to 449 as shown in SEQ ID NO:2.

31. (New) An isolated polynucleotide encoding a polypeptide, the amino acid sequence of which consists of residues 437 to 450 as shown in SEQ ID NO:2.

32. (New) An isolated polynucleotide encoding an immunogenic polypeptide, the amino acid sequence of which comprises 13 consecutive amino acids as shown in SEQ ID NO:2.

33. (New) The isolated polynucleotide encoding an immunogenic polypeptide according to claim 32, wherein the amino acid sequence comprises 14 consecutive amino acids as shown in SEQ ID NO:2.

34. (New) An isolated polynucleotide encoding a polypeptide, the amino acid sequence of which has at least 90% identity to the amino acid sequence as shown in SEQ ID NO:2 from residue 383 to residue 464, and wherein the polypeptide binds an integrin.

35. (New) An isolated polynucleotide encoding a polypeptide, the amino acid sequence of which has at least 90% identity to the amino acid sequence as shown in SEQ ID NO:2 from residue 164 to residue 464 wherein the polypeptide binds an integrin.

36. (New) An isolated polynucleotide encoding a polypeptide wherein the amino acid sequence of the polypeptide is residues 164 to 464 of SEQ ID NO:2.

37. (New) An isolated polynucleotide encoding a polypeptide, the amino acid of which has at least 90% identity to the amino acid sequence as shown in SEQ ID NO:2 from residue 164 to residue 696 wherein the polypeptide binds an integrin.

38. (New) The isolated polynucleotide according to claim 37, wherein the amino acid sequence of the polypeptide is residues 164 to 696 of SEQ ID NO:2.

39. (New) An isolated polynucleotide encoding a polypeptide, the amino acid of which has at least 90% identity to the amino acid sequence as shown in SEQ ID NO:2 from residue 383 to residue 696, wherein the polypeptide binds an integrin.

40. (New) An isolated polynucleotide encoding a polypeptide, the amino acid sequence of which has at least 90% identity to the amino acid sequence as shown in SEQ ID NO:2 from residue 1 to residue 696 wherein the polypeptide binds an integrin.

41. (New) A polynucleotide selected from the group consisting of:
a) the polynucleotide as shown in SEQ ID NO:1; and
b) a polynucleotide that is complementary to a).

REMARKS

Consideration of the above-captioned application in view of the above amendments and following remarks is requested. Claims 8, 9, 11-13, 15, 18-23 and 28-41 are now in the case. Claims 1-7, 10, 14, 16-17, and 24-27 have been canceled. Claims 8, 9, 11-13, 15, 18-23 have been amended. Claims 28-41 are newly added. Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned "Version with Markings to Show Changes Made".

On the basis of the above amendments and remarks, Applicants believe that the claims are in condition for allowance. Applicants believe that no new matter has been added. Applicants reserve the right to prosecute the original claims in another continuing application. Consideration of the application and its allowance are requested. If for any reason the Examiner feels that a telephone conference would expedite prosecution of the application, the Examiner is invited to telephone the undersigned at (206) 442-6752.

Respectfully Submitted,

Robyn Adams
Registration No. 44,495

Enclosures:

Express Mail Certificate
Request for filing under 37 C.F.R. §1.53(b): Application and fee Transmittal (in duplicate)
Letter regarding Computer Readable Sequence Listing
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Version with Markings to Show Changes Made

VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the claims:

Claims 1-7, 10, 14, 16-17, 24-27 have been canceled.

Claims 8, 9, 11-13, 15, 18-23 have been amended as follows:

8. (Amended) An isolated polynucleotide molecule encoding a polypeptide molecule, wherein the polypeptide molecule comprises a contiguous sequence of [14] 13 amino acids of SEQ ID NO:2, wherein the contiguous sequence comprises residues at positions 443 to 445 of SEQ ID NO:2, and wherein the polypeptide binds an integrin.

9. (Amended) An isolated polynucleotide molecule [according to claim 8] encoding a polypeptide molecule, wherein the polypeptide molecule comprises residues 437 to 450 of SEQ ID NO:2.

11. (Amended) An isolated polynucleotide molecule [according to claim 10] encoding a polypeptide molecule, wherein the polypeptide molecule [is] comprises residues 164 to 382 of SEQ ID NO:2.

12. (Amended) An isolated polynucleotide molecule [according to claim 10] encoding a polypeptide molecule, wherein the polypeptide molecule [is] comprises residues 383 to 464 of SEQ ID NO:2.

13. (Amended) An isolated polynucleotide molecule [according to claim 10] encoding a polypeptide molecule, wherein the polypeptide molecule [is] comprises residues 465 to 696 of SEQ ID NO:2.

15. (Amended) An isolated polynucleotide encoding a fusion protein having a first segment and a second segment, wherein the first segment comprises [a first polypeptide encoding] a polypeptide having a protease domain and the second segment comprises [a second polynucleotide encoding] a polypeptide that has a contiguous sequence of [14] 13 amino acids between residues 383 and 464 of SEQ ID NO:2, [and] wherein the first segment is positioned amino-terminally to the second segment, and wherein the protein binds an integrin.

18. (Amended) [An] The isolated polynucleotide molecule according to claim [17] 12, wherein the [polynucleotide] polypeptide molecule [is selected from the group consisting of:

a) a polynucleotide molecule that encodes a polypeptide molecule that is at least 80 % identical to] comprises residues 383 to 696 of SEQ ID NO:2[; and

b) a polynucleotide molecule that is complementary to a)].

19. (Amended) [An] The isolated polynucleotide molecule according to claim [17] 18, wherein the [polynucleotide] polypeptide molecule [is selected from the group consisting of:

a) a polynucleotide molecule that encodes a polypeptide molecule that is at least 80 % identical to] comprises residues 1 to 696 of SEQ ID NO:2[; and

b) a polynucleotide molecule that is complementary to a)].

20. (Amended) An expression vector comprising the following operably linked elements:

a) a transcription promoter;

b) a DNA segment [encoding the polypeptide of claim 1] comprising the polynucleotide according to claim 12; and

c) a transcription terminator.

21. (Amended) [An] The expression vector of claim 20 wherein the DNA segment further encodes an affinity tag.

22. (Amended) A cultured cell into which has been introduced [an] the expression vector according to claim [21] 20, wherein said cell expresses the polypeptide encoded by the DNA segment.

23. (Amended) A method of producing a polypeptide comprising culturing [a] the cell according to claim 22, whereby said cell expresses the polypeptide encoded by the DNA segment; and recovering the polypeptide.

Claims 28-41 have been added.